

REMARKS

Introduction:

Claims 1-6, 9-14, 23, and 24 stand rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,847,786 to Wang. Claims 23 and 24 stand rejected under 35 U.S.C. 101. Claims 7, 8, and 15-22 stand rejected under 35 U.S.C. 103(a) by Wang in view of US Patent 4,742,551 to Deering. Claims 1-24 have been cancelled, rendering the above rejections moot. Claims 25-39 have been added and support for those claims can be found in Fig. 1, for example, of the Specification. Reconsideration and early allowance of the newly added claims are respectfully requested.

The Wang Reference and Claim 25:

First, Applicants would like to thank Examiner Larose for granting an interview on January 28, 2005. While nothing definitive was decided, Applicants have added independent claims 25, 32, and 39, which are method, apparatus, and program product claims, respectively. Applicants respectfully submit that claim 39 is statutory under 35 U.S.C. 101. Further, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, USPQ2d 1051, 1053 (Fed. Cir. 1987). In this regard, Applicants respectfully submit that Wang fails to disclose each and every element of the independent claims 25, 32, and 39. For example, in claim 25 (and claims 32 and 39), Wang fails to disclose the following elements (emphasis added):

in response to the pixel containing Image Information of significance, determining if only an immediately previously scanned single pixel contains image information of significance;

in response to the single pixel containing image information of significance, assigning the pixel to an existing image segment of the single pixel;

in response to the single pixel not containing image information of significance, creating a new image segment and assigning the pixel to the new image segment;

Rather, Wang's scanning method assigns an object label to a pixel based on the object level of three adjacent window pixels, rather than only a single pixel. That is, Wang assigns a pixel to

"one {object label} of the three adjacent pixels in the scanning window if the scanned pixel and the adjacent pixel have the same classification value, or a new object level {label} if the scanned pixel does not have the same classification as another scanning window pixel" (column 7, lines 12-16). Accordingly, Wang compares the pixel's classification with three adjacent pixels and, hypothetically, if a match occurs with only one of them, Wang assigns the pixel to the matched pixel's object label. However, if a match occurs with two or more adjacent pixels (one of them being the immediately previously scanned pixel) and each has a different object label, it is unclear which one will be assigned to the pixel. Regardless, Wang states that it is a requirement to compare the pixel with three adjacent pixels, i.e., "The scanning method requires that each of the three adjacent window pixels have a previously assigned object label" (see column 7, lines 19-21). This explicit requirement of three adjacent pixels teaches away from Applicants claimed step of using only a single pixel and, therefore, does not motivate, teach, or suggest Applicant's claimed invention. For at least these reasons, Applicants respectfully submit that Wang does not anticipate nor render obvious the newly added independent claims 25, 32, and 39.

The Wang Reference and Claim 26:

Moreover, in dependent claim 26 (and claims 33 and 39), Wang fails to disclose the following elements (emphasis added):

- (a) determining if only a single, previously scanned pixel adjacent to the pixel (adjacent pixel), that is not the single pixel, contains image information of significance;
 - (b) determining if the adjacent pixel is assigned to an image segment that does not include the pixel;
- in response to steps (a) and (b) being true, merging the new image segment or the existing image segment, respectively, that includes the pixel, with the image segment;


Rather, Wang specifically teaches merging object labels based on a comparison between the pixel's classification and that of two orthogonal pixels, rather than only a single adjacent pixel. That is, if two orthogonal window pixels have the same classification value as the pixel in question, and the two orthogonal pixels have been previously given different object labels, the two labels are merged (column 7, lines 46-57). Accordingly, based on Applicants' understanding of Wang, Wang compares the pixel's classification with that of two orthogonal window pixels and, if a match occurs between all three, the object labels merge. However, if the

pixel's classification matches only one of the two orthogonal window pixels, no merger occurs. Thus, Wang discloses a complex and complicated algorithm that operates quite differently from Applicant's claimed efficient invention. For at least these reasons, Applicants respectfully submit that Wang does not anticipate nor render obvious the claims 26, 33, and 39.

Conclusion:

In summary, Applicants respectfully submit that newly added independent claims 25, 32, and 39 are patentable and request early allowance of those claims. Moreover, because the dependent claims include all limitations of their parent claim, Applicants respectfully request early allowance of those claims too. If the Examiner believes that a telephonic conversation would be useful, please do not hesitate to call at the below number.

Respectfully submitted,



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